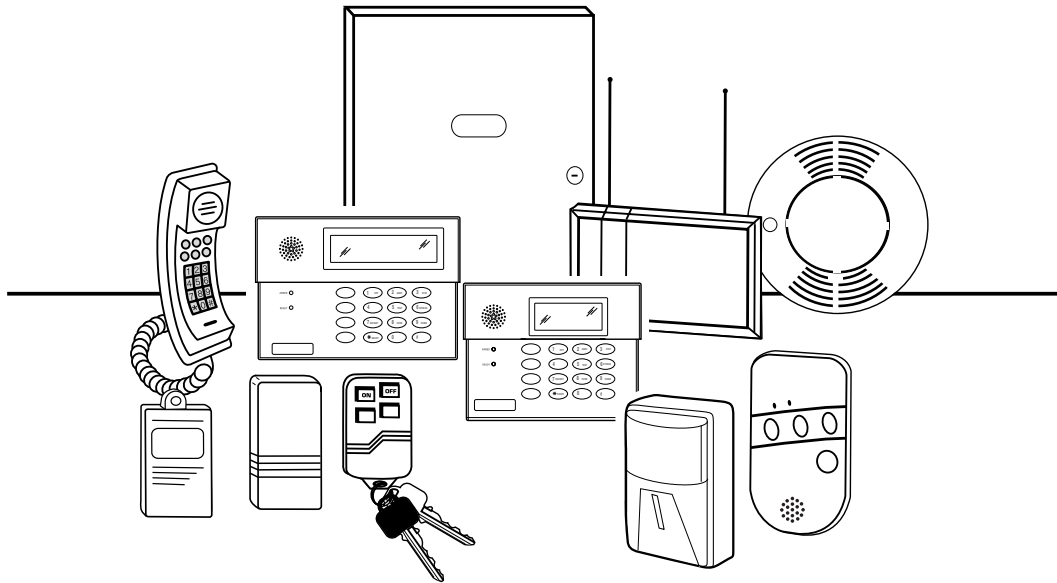


***Safewatch Pro® 3000EN
Entrepreneur 3000EN
Security Manager 3000EN
Security Systems***

***Programming Guide
and
System Installation Notes***

For full installation and programming information, please refer to the
Installation and Setup Guide (K5305V6 or higher).



Meets ADT Security Services Triple Standards Requirements:



Standards for Security and Fire



Standard for False Alarm Reduction



California State Fire Marshal Approval



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Attention Commercial Installers and Service personnel:

Please note that **POLICE** and **FIRE** are printed on the top two Panic buttons on the keypad. In most ADT control panels, these keypad panic buttons are defaulted to be both active and audible for residential installations.

For commercial installations, the FIRE panic button must be deactivated by programming and covered with an enclosed blank sticker. The Police panic button should be left as defaulted: active and audible. If customer desires a Silent/ Hold up button, it must be sold as a separate device, and programmed as such.

NOTE: Please ensure the programming of these panic buttons match both the customer's agreement, and all local and state ordinances. If local ordinances also stipulate deactivation of the Police panic button, then it should also be deactivated and covered with an enclosed blank sticker.

PROGRAMMING NOTES

Compatibility

- This document applies to systems with microprocessor version number **WA3001-7.0** or higher.

PROGRAM MODE OVERVIEW

IMPORTANT: The Real-Time Clock must be set before the end of the installation.

To Enter Programming Mode:

Local programming requires the use of a Custom English touchpad connected to the touchpad terminals on the control.

1. POWER UP, then depress **[*]** and **[#]** both at once, within 50 seconds of powering up.
2. OR, Initially, key: **Installer Code (6 + 3 + 2 + 1)** plus **8 + 0 + 0**.
3. OR, If different **Installer Code** is programmed, key: **New Installer Code + 8 + 0 + 0**.
(if *98 was used to exit previously, method 1 above must be used to enter the program mode again)

PROGRAMMING COMMANDS

Task	Command/Explanation
Go to a Data Field	Press [*] + [Field Number] , followed by the required entry.
Entering Data	When the desired field number appears, simply make the required entry. When the last entry for a field is entered, the keypad beeps three times and automatically displays the next data field in sequence. If the number of digits that you need to enter in a data field is less than the maximum digits available (for example, the phone number fields *41, *42), enter the desired data, then press [*] to end the entry. The next data field number is displayed.
Review a Data Field	Press [#] + [Field Number] . Data will be displayed for that field number. No changes will be accepted in this mode.
Deleting an Entry	Press [*] + [Field Number] + [*] . (Applies only to fields *40 thru *45, *94, and pager fields)
Initialize Download ID	Press *96 . Initializes download ID and subscriber account number.
Reset Factory Defaults	Press *97 . Sets all data fields to original factory default values.
Zone Programming	Press *56 . Zone characteristics, report codes, alpha descriptors, and serial numbers for 5800 RF transmitters.
Function Key Programming	Press *57 . Unlabeled touchpad keys (known as ABCD keys) for special functions
Zone Programming (Expert Mode)	Press *58 . Same options as *56 mode, but with fewer prompts. Intended for those familiar with this type of programming, otherwise *56 mode is recommended.
Output Device Mapping	Press *79 . Assign module addresses and map individual relays/powerline carrier devices
Output Programming	Press *80 . 4229 or 4204 Relay modules, Powerline Carrier devices, or on-board triggers
Zone List Programming	Press *81 . Zone Lists for relay/powerline carrier activation, chime zones, pager zones, etc.
Alpha Programming	Press *82 . Zone alpha descriptors
IP/GSM Programming	Press *29 . For programming the IP/GSM options.
Exit Program Mode with installer code lockout	Press *98 . Exits programming mode and <i>prevents</i> re-entry by: Installer Code + 8 + 0 + 0. To reenter programming mode, the system must be powered down, then powered up. Then use method A above.
Exit Program Mode	Press *99 . Exits program mode and <i>allows</i> re-entry by: Installer Code + 8 + 0 + 0 or method A above.
Scheduling Mode	Enter code + [#] + 64 . Create schedules to automate various system functions.
Site-Initiated Download	Installer code + [#] + 1 (perform while system is disarmed and in normal mode)

AVS QUICK PROGRAMMING COMMANDS (for AAV sessions using the AVS system)

For controls with the firmware revision level 7.0 or higher, these commands automatically configure the control for AVS operation.

- **installer code + [#] + 03**: enable AVS operation
- **installer code + [#] + 04**: enable AVS operation and enable panel sounds on the AVST speaker
- **installer code + [#] + 05**: remove all programming options set by [#] + 03 quick command
- **installer code + [#] + 06**: remove all programming options set by [#] + 04 quick command

Refer to the AVS SYSTEM ENABLE and QUICK PROGRAMMING COMMANDS section for details on the specific options that are set with each command, depending on the control used.

To select the AAV session communication path (phone line/communication device), see field *55 Dynamic Signaling Priority.

To enable AAV operation, use *91 Options field (option 4).

Special Messages

OC = OPEN CIRCUIT (no communication between Touchpad and Control).

EE or **ENTRY ERROR** = ERROR (invalid field number entered; re-enter valid field number).

After powering up, **AC**, **dl** (disabled) or **Busy Standby** and **NOT READY** will be displayed after approximately 4 seconds. This will revert to a **"Ready"** message in approximately 1 minute, which allows PIRS, etc. to stabilize. You can bypass this delay by pressing **[#] + [0]**.

If **E4** or **E8** appears, more zones than the expansion units can handle have been programmed. The display will clear after you correct the programming.

PROGRAMMING FIELDS

- Entry of a number other than one specified will give unpredictable results. Values shown in brackets are factory defaults.

Field	Function	Data Entries	Programmable Values
SYSTEM SETUP (*20–*29)			
*20	INSTALLER CODE	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> [6321]	4 digits, 0–9
*21	QUICK ARM ENABLE	<input type="checkbox"/> <input type="checkbox"/> [1,1] Part. 1 Part.2	0 = no; 1 = yes
*22	RF JAM OPTION	<input type="checkbox"/> [0]	0 = no RF Jam detection; 1 = send RF Jam report <u>UL: must be 1 if wireless devices are used</u>
*23	QUICK (FORCED) BYPASS	<input type="checkbox"/> <input type="checkbox"/> [1,1] Part. 1 Part. 2	0 = no quick bypass <u>UL: must be "0"</u> 1 = allow quick bypass (code + [6] + [#])
* 24	RF HOUSE ID CODE	<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/> Part. 1 Part. 2 Common	00 = disable all wireless touchpad usage 01–31 = using 5827, 5827BD or 5804BD touchpad [00,00,00]
*26	CHIME BY ZONE	<input type="checkbox"/> [0]	0 = no; 1 = yes (select zones to chime on zone list 3, using *81 Menu mode)
*27	POWERLINE CARRIER DEVICE (X-10) HOUSE CODE	<input type="checkbox"/> [0]	0 = A, 1 = B, 2 = C, 3 = D, 4 = E, 5 = F, 6 = G, 7 = H, 8 = I, 9 = J, #10 = K, #11 = L, #12 = M, #13 = N, #14 = O, #15 = P <u>UL: not for fire or UL installations</u>
28	ACCESS CODE FOR PHONE MODULE	<input type="text" value=""/> <input type="text" value=""/> [00] (Partition 1 only)	00 = disable; 1st digit: enter 1–9; 2nd digit: enter # + 11 for "", or # + 12 for "#". <u>UL: must be "00" for UL Commercial Burg. installations</u>

***29 Enable IP/GSM – Communication Device Menu Mode (pass-through programming)** This is a Menu Mode command, not a data field, for programming IP/GSM communication device options. See *29 Menu Mode section in the Installation and Setup Guide for procedures.

ZONE SOUNDS AND TIMING (*31 – *39)

*31	SINGLE ALARM SOUNDING per ZONE	<input type="checkbox"/>	[0]	<p>0 = unlimited sounding; 1 = one sounding per zone</p> <p>SIA NOTE: If "0" selected, "alarm sounding per zone" will be the same as the "number of reports in armed period" set in field *93 (1 if one report, 2 if 2 reports, unlimited for zones in zone list 7).</p> <p>0 = sounder stops at timeout; 1 = no sounder timeout</p> <p>UL: must be "1" for fire install.</p> <p>0 = none; 1 = 4 min; 2 = 8 min; 3 = 12 min; 4 = 16 min;</p> <p>UL: For residential fire alarm installation, must be set for a minimum of 4 min (option 1); for UL Commercial Burglary installations, must be minimum 16 min (option 4)</p>
*32	FIRE ALARMSOUNDER TIMEOUT	<input type="checkbox"/>	[0]	
*33	ALARM SOUNDER (BELL) TIMEOUT	<input type="checkbox"/>	[1]	
*34	EXIT DELAY	<input type="text"/>	<input type="text"/> [60,60]	<p>Part. 1 Part. 2</p> <p>(entries less than 45 will result in a 45-second delay)</p> <p>45 - 96 = 45 - 96 seconds; 97 = 120 seconds</p> <p>SIA Installations: minimum exit delay is 45 seconds</p> <p>UL: see inst. instr. for requirements.</p> <p>Common zones use same delay as partition 1.</p>
*35	ENTRY DELAY 1 (zone type 01)	<input type="text"/>	<input type="text"/> [30,30]	<p>Part. 1 Part. 2</p> <p>Common zones use same delay as partition 1.</p> <p>(entries less than 30 will result in a 30-second delay)</p> <p>30 - 96 = 30 - 96 seconds 97 = 120 seconds 98 = 180 seconds 99 = 240 seconds</p> <p>SIA Installations: minimum entry delay is 30 seconds</p> <p>For UL Residential Burglary Alarm installations, must be set for a maximum of 30 seconds; entry delay plus dial delay should not exceed 1 min. For UL Commercial Burglar Alarm, total entry delay may not exceed 45 seconds.</p> <p>See *35 Entry Delay 1 above for entries.</p>
*36	ENTRY DELAY 2 (zone type 02)	<input type="text"/>	<input type="text"/> [30,30]	
*38	CONFIRMATION OF ARMING DING	<input type="checkbox"/>	<input type="checkbox"/> [0,0]	<p>0 = no; 1 = yes (wired touchpads and RF)</p> <p>2 = yes, RF only (except 5827, 5827BD)</p> <p>UL: must be "1" for UL Commercial Burglar Alarm inst.</p>
*39	POWER UP IN PREVIOUS STATE	N/A		<p>Feature always enabled; field removed in this control.</p>

DIALER PROGRAMMING (*40 – *42)

Enter the number of digits shown. Do not fill unused spaces. Enter 0–9; #+11 for '*'; #+12 for '#'; #+13 for a 2-second pause.

IMPORTANT: The **reporting format** for the Safewatch Pro 3000EN is factory-set as 4-digit Contact ID format for both primary and secondary phone numbers and cannot be changed. Previous versions of this control panel used field *48 (now deleted) to select the reporting format.

*** 40 PABX ACCESS CODE or CALL WAITING DISABLE**

IMPORTANT: Using Call Waiting Disable on a non-call waiting line will prevent successful communication to the central station.

Enter up to 6 digits. If fewer than 6 digits, exit by pressing [*].

Clear entries by pressing ***40***.

SIA Installations: If call waiting is used, enter call waiting disable digits *** (#+11) 70*** plus **"# + 13"** (pause) and set call waiting disable option in field ***91**.

NOTE: The call waiting disable feature cannot be used on a PABX line.

*** 41 PRIMARY PHONE No.**

Enter up to 20 digits; Do not fill unused spaces. If fewer than 20 digits entered, exit by pressing [*]. To clear entries, press ***41***.

*** 42 SECONDARY PHONE No.**

Enter up to 20 digits; Do not fill unused spaces. If fewer than 20 digits entered, exit by pressing [*]. To clear entries, press ***42***.

NOTE: Entry of a number other than one specified will give unpredictable results.

For fields *43 and *45: Enter 0–9; #+11 for B; #+12 for C; #+13 for D; #+14 for E; #+15 for F. To clear entries from field, press ***43*** or ***45***.

Examples: For Acct. **1234**, enter: ; For Acct. **B234**, enter:

*** 43 SUBSCRIBER ID # (Part.1)**

Enter only 4 digits (report format factory-set as 4-digit Contact ID format). See box above for entries.

*** 45 SUBSCRIBER ID # (Part. 2)**

Enter only 4 digits (report format factory-set as 4-digit Contact ID format). See box above for entries.

***47 PHONE SYSTEM SELECT** [3]

If Cent. Sta. IS NOT on a WATS line:

0=Pulse Dial; 1=Tone Dial;

if Cent. Sta. IS on a WATS line:

2 = Pulse Dial; 3 = Tone Dial

***49 SPLIT/DUAL REPORTING** [0]

0 = Disable (Backup report only)

Primary Phone No.

Second Phone No.

1 = Alarms, Restore, Cancel

Others

2 = All except Open/Close, Test

Open/Close, Test

3 = Alarms, Restore, Cancel

All

4 = All except Open/Close, Test

All

5 = All

All

***50 BURGLARY DIAL DELAY** [2,0]

DelayTime Delay Disable

(values other than those stated will give unpredictable results)

UL: Dial delay plus entry delay must not exceed one minute; use zone list 6 to disable dial delay from appropriate zones, if necessary.

Entry 1 – Delay Time:

1 = 15 seconds

2 = 30 seconds

3 = 45 seconds

SIA Installations: delay must be minimum of 15 seconds

Entry 2 – Delay Disable: 0 = use delay set in entry 1

1 = dial delay disabled for zones listed in zone list 6 (use zone list 6 to enter those zones that require dial delay to be disabled; these zones ignore the setting in entry 1)

***53 MISC. FAULT DELAY TIME** [0]
(Zone Type 25 or Configurable Zone Type)

UL: may only be used on non-burglar alarm/ non-fire alarm zones when used in fire and/or UL burglar alarm installation

0 = 15 seconds 6 = 2-1/2 min #+12 = 8 min

1 = 30 seconds 7 = 3 min #+13 = 10 min

2 = 45 seconds 8 = 4 min #+14 = 12 min

3 = 60 seconds 9 = 5 min #+15 = 15 min

4 = 90 seconds #+10 = 6 min

5 = 2 minutes #+11 = 7 min

***54 DYNAMIC SIGNALING DELAY** [0]

Select delay from 0 to 225 secs, in 15-sec increments.

0 = no delay (both signals sent), 1 = 15 secs,

2 = 30 secs, 3 = 45 secs, etc.

UL: for installations with line security, must be "0."

***55 DYNAMIC SIGNALING PRIORITY / AAV PATH SELECT** [0]

0 = Primary Dialer first / AAV via phone line

1 = Communication Device (LRR) first / AAV via communication device path

For UL Commercial Burglary installations that use a DACT and LRR, this field must be "0".

***56, *57, *58 MENU MODES**

These are Menu Mode commands, not data fields, for Zone Programming, Function Key Programming, and Expert Mode Zone Programming respectively. See their respective sections in the Installation and Setup Guide for procedures.

SYSTEM STATUS, & RESTORE REPORT CODES (*59 – *68, *70 – *76, & *89) FOR CONTACT ID® REPORTING:

Enter any digit (other than "0") in the *first* box, to enable zone to report (entries in the *second* boxes will be ignored).

UL: Also see installation instructions K5305V4 for requirements. † Required for UL commercial burglar alarm installations.

†† Required for UL commercial burglar alarm and residential fire alarm installations.

***59 EXIT ERROR ALARM REPORT CODE** [1]

SIA NOTE: Always enabled. Sends both exit error **and** zone alarm reports in the event of an exit error condition. Also see field *69.

***60 TROUBLE REPORT CODE** [10]

Any non-zero entry in first digit enables report. ††

***61 BYPASS REPORT CODE** [00]

Any non-zero entry in first digit enables report. †

***62 AC LOSS REPORT CODE** [00]

Any non-zero entry in first digit enables report. ††

***63 LOW BAT REPORT CODE** [10]

Any non-zero entry in first digit enables report. ††

***64 TEST REPORT CODE** [10]

Any non-zero entry in first digit enables report. ††

Use Scheduling mode to set periodic test reports.

***65 OPEN REPORT CODE** [0,0,0]
Part. 1 Part. 2 Common

Any non-zero entry enables report for partition. †

***66 ARM AWAY/STAY RPT CODE** [0,0,0,0,0,0] Any non-zero entry
Away Stay (Part. 1) Away Stay (Part. 2) Away Stay (Common) enables report

NOTE: "OPEN" reports are not sent if the associated closing report is not enabled.

UL: † Required for UL commercial burglar alarm installations. †† Required for UL commercial burglar alarm and residential fire alarm installations. ††† Required for residential fire alarm installations. †††† Must be enabled if wireless devices are used.

*67	RF XMTR LOW BAT REPORT CODE	<input type="text"/> [10]	Any non-zero entry in first digit enables report. ††††
*68	CANCEL REPORT CODE	<input type="text"/> [10]	SIA NOTE: Report enabled.
*69	RECENT CLOSING REPORT CODE	<input type="text"/> [11]	SIA NOTE: Always enabled. Sends both recent closing and zone alarm reports if fault occurs within 2 min. after exit time expires. Also see field *59.
*70	ALARM RESTORE RPT CODE	<input type="text"/> [1]	Any non-zero entry enables report. ††
*71	TROUBLE RESTORE RPT CODE	<input type="text"/> [10]	Any non-zero entry in first digit enables report. †††
*72	BYPASS RESTORE RPT CODE	<input type="text"/> [00]	Any non-zero entry in first digit enables report. †
*73	AC RESTORE RPT CODE	<input type="text"/> [00]	Any non-zero entry in first digit enables report. ††
*74	LOW BAT RESTORE RPT CODE	<input type="text"/> [10]	Any non-zero entry in first digit enables report. ††
*75	RF XMTR LO BAT RST RPT CODE	<input type="text"/> [10]	Any non-zero entry in first digit enables report. ††††
*76	TEST RESTORE RPT CODE	<input type="text"/> [10]	Any non-zero entry in first digit enables report. ††
OUTPUT AND SYSTEM SETUP (*77 – *93)			
*77	DAYLIGHT SAVINGS TIME START\END MONTH	<input type="text"/> [3][11]	0 = Disabled 1-12 = month (1 = January, 2 = February, etc) #+10 = October; #+11 = November; #+12 = December
*78	DAYLIGHT SAVINGS TIME START\END WEEKEND	<input type="text"/> [2][1]	0 = disabled, 1 = first, 2 = second, 3 = third 4 = fourth, 5 = last, 6 = next to last, 7 = third to last
*79, *80, *81, *82	MENU MODES		These are Menu Mode commands, not data fields, for Output Device Mapping, Output Programming, Zone List Programming, and Alpha Programming respectively. See page 2 and their respective sections in the Installation and Setup Guide for procedures.
*84	AUTO STAY ARM	<input type="text"/> [3]	0 = no, 1 = partition 1 only 2 = partition 2 only, 3 = both partitions
*85	CROSS ZONE TIMER <div style="border: 1px solid black; padding: 2px;">This option not for use in UL installations.</div> NOTE: Cross zones take effect only after exit delay expires.	<input type="text"/> [0] <small>(assign cross zones on zone list 4, with *81 Menu mode)</small>	0 = 15 seconds 6 = 2-1/2 min #+12 = 8 min 1 = 30 seconds 7 = 3 min #+13 = 10 min 2 = 45 seconds 8 = 4 min #+14 = 12 min 3 = 60 seconds 9 = 5 min #+15 = 15 min 4 = 90 seconds #+10 = 6 min 5 = 2 minutes #+11 = 7 min
*86	CANCEL VERIFY DISPLAY	<input type="text"/> [1]	0 = no, 1 = yes
*89	EVENT LOG FULL REPORT CODE	<input type="text"/> [00]	Enter any digit (other than "0") in the first box, to enable report (entries in the second box are ignored)
*90	EVENT LOG ENABLES NOTE: System messages are logged when any non-zero selection is made.	<input type="text"/> [15] <small>Example: To select "Alarm/Alarm Restore", and "Open/Close", enter 9 (1 + 8); To select all, enter #15.</small>	0 = None 1 = Alarm/Alarm Restore 2 = Trouble/Trouble Restore 4 = Bypass/Bypass Restore 8 = Open/Close
*91	OPTION SELECTION	<input type="text"/> <input type="text"/> [8,0] <small>Options Call Waiting Disable</small> <small>Multiple choice example: for AAV (4) + Exit Delay restart (8) enter # + 12; for all (1 + 4 + 8), enter # + 13.</small>	Entry 1 - Options: 0 = None 1 = Bell Supervision UL: required for fire alarm install 4 = AAV UL: must use ADEMCO UVCN module 8 = Exit Delay Restart/Reset UL: must be disabled SIA Installations: Exit Delay should be enabled. Entry 2 (SIA Installations): - Call Waiting Disable: 0 = no call waiting 1 = call waiting disable digits (*70) entered in field *40; (when selected, the system dials the entry in field *40 only on alternate dial attempts; this allows proper dialing in the event call waiting service is later canceled by the user). Entry 1:: 0 = disabled, 1-15 = 1 min - 15 min (#+10 = 10 min; #+11 = 11 min; #+12 = 12 min; #+13 = 13 min; #+14 = 14 min; #+15 = 15 min) Entry 2: 0 = Touchpad display when line is faulted 1 = Touchpad display plus touchpad trouble sound 2 = Same as "1", plus programmed output device STARTS. If either partition is armed, external sounder activates also. NOTE: Output Device must either be programmed to be STOPPED in field *80 or STOPPED by Code + # + 8 + output number.
*92	PHONE LINE MONITOR ENABLE <div style="border: 1px solid black; padding: 5px;">UL: Field *92 must be enabled for fire alarm, UL commercial burglar alarm, and UL residential burglar alarm installations. If the control unit is used on a UL commercial burglar alarm system which requires 2 methods of remote communication, then the control unit's DACT and the other method of signal transmission must monitor each other against communication failure and line fault. The fault must be received and annunciated within 200 seconds of its occurrence.</div>	<input type="text"/> <input type="text"/> [0,0] 1 2	
*93	No. OF REPORTS IN ARMED PERIOD PER ZONE (Swinger Suppression)	<input type="text"/> <input type="text"/> [1,0] <small>No. Report Pairs Unlimited Reports Enable</small>	Entry 1 - Restrict No. of Report Pairs: 1 = 1 report pair SIA Installations: Must be set 2 = 2 report pairs for option 1 or 2. Entry 2 (SIA Installations) - Unlimited Reports Enable: 0 = restrict reports to the setting in entry 1 1 = unlimited reports for zones listed in zone list 7 (use zone list 7 to enter those zones that require unlimited reporting; these zones ignore the setting in entry 1)

DOWNLOAD INFORMATION (*94, *95)

***94** DOWNLOAD PHONE No.

Enter up to 20 digits, 0–9; #+11 for '*'; #+12 for '#'; #+13 for a 2-second pause. Do not fill unused spaces. If fewer than 20 digits, exit field by pressing *. To clear entries from field, press *94*.

UL: downloading may be performed only if a technician is at the site.

Uploading/downloading via the Internet has not been evaluated by UL.

***95** RING COUNT FOR DOWNLOADING

 [15]

0 = Disable Station Initiated Download;
1–14 = number of rings (1–9, # +10 =10, # +11 =11,
+12 =12, # +13 =13, # +14 =14);
15 = answering machine defeat (# +15 =15).

NOTE: Do not enter "0" if using
4286 Phone Module.

These are commands, not data fields. See page 2.

***96, *97** INITIALIZE/RESET DEFAULTS

***98, *99** EXIT COMMANDS

These are commands, not data fields. See page 2.

PAGER OPTIONS *160–*172

***160** PAGER 1 PHONE No.

Enter up to 20 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***161** PAGER 1 CHARACTERS

Enter the optional prefix characters, up to 16 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***162** PAGER 1 REPORT OPTIONS

Part. 1 Part. 2 common
[0,0,0]

† Open/s/closes report to pager only when arming/disarming from a touchpad using a security code; auto-arming/disarming, arming with assigned button, and keyswitch arming do not send pager messages.

For each partition, select from the following options:

0 = no reports sent
1 = Opens/closes all users enabled for paging†
4 = All alarms and troubles
5 = All alarms / troubles, and opens/closes for all users
12 = Alarms / troubles for zones entered in zone list 9
13 = Alarms / troubles for zones entered in zone list 9, and opens/closes for all users

***163** PAGER 2 PHONE No.

Enter up to 20 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***164** PAGER 2 CHARACTERS

Enter the optional prefix characters, up to 16 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***165** PAGER 2 REPORT OPTIONS

 [0,0,0]

Part. 1 Part. 2 common

See field *162 for reporting options. Select for each partition (use zone list 10 if using options 12 or 13).

***166** PAGER 3 PHONE No.

Enter up to 20 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***167** PAGER 3 CHARACTERS

Enter the optional prefix characters, up to 16 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***168** PAGER 3 REPORT OPTIONS

 0,0,0]

Part. 1 Part. 2 common

See field *162 for reporting options. Select for each partition (use zone list 11 if using options 12 or 13).

***169** PAGER 4 PHONE No.

Enter up to 20 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***170** PAGER 4 CHARACTERS

Enter the optional prefix characters, up to 16 digits. 0–9; #+11 = '*'; #+12 = '#'; #+13 = 2-second pause.

***171** PAGER 4 REPORT OPTIONS

 [0,0,0]

Part. 1 Part. 2 common

See field *162 for reporting options. Select for each partition (use zone list 12 if using options 12 or 13).

***172** PAGER DELAY OPTION FOR ALARMS

 [3]

0 = none, 1 = 1 minute, 2 = 2 minutes, 3 = 3 minutes
This delay is for ALL pagers in the system.

MISCELLANEOUS SYSTEM FIELDS *173–*181

***173** RF REPORTING OPTIONS

 [3]

UL: must be "3" (RF tamper reports and RF button low battery reports)

Example: Entering "10" (8 + 2) enables button-type trans to send low battery reports and delay all reports for 28 days.

0 = disable all options
1 = RF Tamper reports during disarm
2 = RF button types send low battery
8 = RF low battery reports delayed (delayed 28 days)

***175** UP AND ABOUT TIME

 [0] (hourly increments)

0 = none, 1 = 1 hour, 2 = 2 hours,... 15 = 15 hours

***176** LACK OF USAGE OPTION

 [0]

1–15 = number of weeks selected (1 week increments)
If panel is not armed within the time period selected, a report will be sent to the central station.

***177** DEVICE DURATION 1, 2
(used in *80 Menu mode-Device Actions 5/6)

 [0] [0]
1 2

0 = 15 seconds	6 = 2-1/2 min	#+11 = 7 min
1 = 30 seconds	7 = 3 min	#+12 = 8 min
2 = 45 seconds	8 = 4 min	#+13 = 10 min
3 = 60 seconds	9 = 5 min	#+14 = 12 min
4 = 90 seconds	#+10 = 6 min	#+15 = 15 min
5 = 2 minutes		

***180 SINGLE ZONE BYPASS** ☐ [0] 0 = disable; 1 = enabled

***181 50/60 HERTZ AC OPERATION** ☐ [0] 0 = 60 Hz; 1 = 50 Hz

CONFIGURABLE ZONE TYPE OPTIONS *183-*181

*182 CONFIGURABLE ZONE TYPE 90

IMPORTANT: Be careful when selecting combinations of options for configurable zone types. Contradictory options can cause unpredictable results.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7	8	9	10

Enter the appropriate value for each entry, 1-10, based on the charts provided on the next page. Each entry is the sum of the values of its selected options (0-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14, #+15=15).

UL: Do not configure zones as a fire alarm or UL burglar alarm zone.

*183 ZONE TYPE 90 REPORT CODES

IMPORTANT: Use existing Contact ID® codes, if appropriate, or define unique codes in CID code range 750-789. See important note in installation instructions.

90 ALARM ID: XXX
TROUBLE ID: XXX

Enter the desired 3-digit Contact ID® report codes for alarms and troubles occurring on zones assigned to this zone type. Enter the codes sequentially (all 6 digits). When entering digits, [#] moves cursor back, [*] moves forward. Press [*] when done to continue.

NOTE: Zone alarm and trouble report codes and relevant restore codes must be enabled in order for the configurable zone type codes to be reported.

*184 CONFIGURABLE ZONE TYPE 91

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1	2	3	4	5	6	7	8	9	10

Enter the appropriate value for each value, 1-10, based on the charts provided on the next page. Each entry is the sum of the values of its selected options (0-9, #+10=10, #+11=11, #+12=12, #+13=13, #+14=14, #+15=15).

UL: Do not configure zones as a fire alarm or UL burglar alarm zone.

*185 ZONE TYPE 91 REPORT CODES

See *183 for notes.

91 ALARM ID: XXX
TROUBLE ID: XXX

See *183 for notes.

*189 TOUCH SCREEN DEVICE (AUI) ENABLE

Touch Screen Compatibility Note: To ensure proper touch screen device operation, use AUI devices with the following rev levels: Touch Screen style touchpads use version 1.0.9 or higher; iCenter use version 1.1.175 or higher.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	[1,1,1,1]
AUI 1	AUI 2	AUI 3	AUI 4	

0 = disabled
1 = partition 1
2 = partition 2
3 = partition 3 (common)

The system supports up to four (4) touch screen style touchpads (e.g., iCenter and 6270ADT).

Enter each touch screen (AUI) devices's home partition.

NOTES:

- A. Use of AUI does not affect the number of standard touchpads supported.
- B. Touch Screen device addresses must be set as follows:
AUI 1: address 1; AUI 2: address 2
AUI 3: address 5; AUI 4: address 6

TOUCHPAD OPTIONS *190-*196 (NOTE: Options for touchpad 1, address 16 are set by the factory and cannot be changed.)

NOTE: Each touchpad must be assigned a unique address. Touchpads programmed with the same address will give unpredictable results.

*190 TOUCHPAD 2 DEVICE ADDRESS 17

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

Partition: 0 = keypad disabled; 1-3 = part. no. (3 = com)
Sound: 0 = no suppression
1 = suppress arm/disarm and E/E beeps
2 = Suppress chime beeps only
3 = suppress arm/disarm, E/E, & chime beeps

*191 TOUCHPAD 3 DEVICE ADDRESS 18

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

See field *190 for entries.

*192 TOUCHPAD 4 DEVICE ADDRESS 19

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

See field *190 for entries.

*193 TOUCHPAD 5 DEVICE ADDRESS 20

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

See field *190 for entries.

*194 TOUCHPAD 6 DEVICE ADDRESS 21

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

See field *190 for entries.

*195 TOUCHPAD 7 DEVICE ADDRESS 22

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

See field *190 for entries.

*196 TOUCHPAD 8 DEVICE ADDRESS 23

<input type="checkbox"/>	<input type="checkbox"/>	[0] [0]
Part.	Sound	

See field *190 for entries.

*197 EXIT TIME DISPLAY INTERVAL

<input type="checkbox"/>	[0]
--------------------------	-----

0 = no display; 1-5 = seconds between display refresh
NOTES: A. If enabled and using only 2-digit fixed-word touchpads (e.g. 6150RFADT), do not set exit delay time greater than 96 seconds (2-digit displays can show time only up to 99 seconds).

B. If using more than one touch screen device with the system, leave field *197 set to the default value "0." Touch Screen style keypads automatically display remaining exit time in one-second increments.

*198 DISPLAY PARTITION NUMBER (for Custom Display Touchpads)

<input type="checkbox"/>	[0]
--------------------------	-----

0 = no
1 = yes (partition no. appears on Custom Display)

*199 ECP FAIL DISPLAY

<input type="checkbox"/>	[0]
--------------------------	-----

0 = 3-digit display ("1" + device address)
1 = 2-digit fixed-display as "91"

Configurable Zone Types Worksheets

Configurable zone types 90 and 91 can be programmed via downloader software or from a touchpad using data fields *182-*185. Configurable zone types 92 and 93 can only be programmed using the downloader software.

Programming Configurable Zone Type options involves making 10 entries in data field *182 for zone type 90 and field *184 for zone type 91, where each entry represents the sum of the values of the various options as shown in the tables below. Use fields *183 and *185 to program Contact ID® report codes for these zone types.

RF ZONE NOTE: The “open” option in entries 1, 3, and 5 is not applicable for RF zones. Use the “intact EOL” option for normal RF zone conditions and “shorted” for off-normal RF zone conditions.

ENTRY 1			ENTRY 2	
Response when system disarmed and zone is:			Auto Restore	Vent Zone
Intact EOL RF zone normal	Open RF zone N/A	Shorted RF zn off-normal		
0 = normal 1 = alarm 2 = trouble 3 = fault	0 = normal 4 = alarm 8 = trouble 12 = fault	0 = normal 1 = alarm 2 = trouble 3 = fault	0 = no 4 = yes	0 = no 8 = yes
Entry 1 = EOL + Open			Entry 2 = Short + auto restore + vent zone	

ENTRY 3			ENTRY 4	
Response when armed STAY and zone is:			Byp. when disarmed	Byp. when armed
Intact EOL RF zone normal	Open RF zone N/A	Shorted RF zn off-normal		
0 = normal 1 = alarm 2 = trouble 3 = fault	0 = normal 4 = alarm 8 = trouble 12 = fault	0 = normal 1 = alarm 2 = trouble 3 = fault	0 = no 4 = yes	0 = no 8 = yes
Entry 3 = EOL + Open			Entry 4 = Short + byp. disarmed + byp. armed	

ENTRY 5			ENTRY 6	
Response when armed AWAY and zone is:			Dial Delay (see field *50)	Fault Delay (see field *53)
Intact EOL RF zone normal	Open RF zone N/A	Shorted RF zn off-normal		
0 = normal 1 = alarm 2 = trouble 3 = fault	0 = normal 4 = alarm 8 = trouble 12 = fault	0 = normal 1 = alarm 2 = trouble 3 = fault	0 = no 4 = use delay	0 = no 8 = use delay see note 1
Entry 5 = EOL + Open			Entry 6 = Short + dial delay + fault delay	

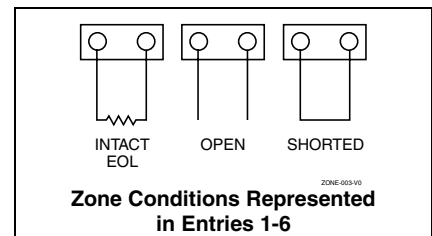
ENTRY 7		ENTRY 8		
Display Faults	Power Reset/ Verification	Use Entry Delay 1/2	Use Exit Delay	Respond as Interior Type
0 = show alarms when armed & disarmed 1 = don't show alarms when armed (show alarms, trbles, faults when disarmed) 3 = never show any alarms, trbles, faults	0 = no 4 = power reset after fault (by code + OFF) 12 = verification (see zone type 16)	0 = no 1 = delay 1 2 = delay 2	0 = no 4 = use exit delay	0 = no 8 = yes see note 2
Entry 7 = fault display + power reset/verification		Entry 8 = entry delay 1/entry delay 2 + exit delay + interior zone type		

ENTRY 9			ENTRY 10	
Alarm Sounds	Use Bell Timeout	Respond as Fire Zone	Trouble Sounds	Chime when Chime Mode On
0 = none 1 = steady touchpad 2 = steady bell and touchpad 3 = pulsing bell and touchpad	0 = no 4 = yes see fields *32, *33	0 = no 8 = yes see zone type 09; see note 4	0 = none 1 = periodic beep 2 = trouble beeps	0 = no 4 = yes
Entry 9 = alarm sounds + bell timeout + fire zone			Entry 10 = trouble sounds + chime	

Entries for Fields *182 and *184		
Entry	Zone Type 90 (field *182)	Zone Type 91 (field *184)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

To calculate the value of each entry:

Simply add the values of the selected options in each of the entry's columns (one option per column). For example, to program Entry 2 for “alarm response to short,” “auto restore on,” but not a “vent zone,” enter 5 (“1” for alarm short + “4” for auto restore yes + “0” for vent zone no).



NOTES:

- Do not use the “fault delay” option with a configurable zone type if it is set for an entry or exit delay, otherwise unpredictable results may occur.
- To create an interior type zone, select “respond as interior zone type” (entry 8, interior type = yes), and set zone response to “fault” in entries 3-4 to ensure fault displays; do not set as “normal,” “alarm,” or “trouble.”
- Do not set fire zones to respond as a “fault” (entries 1-6), otherwise faults will not display unless the [*] key is pressed.
- 4219/4229 modules must use EOLRs or unpredictable results may occur.

***56 Zone Programming Worksheet** [default values shown in brackets]

Zone	Zn Type	Part.	Report	Hardwire Type	Rsp. Time	Location	
1	[01]	[1]		[EOL]	[3]		
2	[01]	[1]		[EOL]	[1]		
3	[10]	[1]		[EOL]	[1]		
4	[10]	[1]		[EOL]	[1]		
5	[10]	[1]		[EOL]	[1]		
6	[01]	[1]		[EOL]	[1]		
7	[01]	[1]		[EOL]	[1]		
8	[01]	[1]		[EOL]	[1]		
Zone	Zn Type	Part.	Report	Input Type	Loop	Serial No.	Location
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49		[1]		[BR]	[1]		
50		[1]		[BR]	[1]		
51		[1]		[BR]	[1]		
52		[1]		[BR]	[1]		
53		[1]		[BR]	[1]		
54		[1]		[BR]	[1]		
55		[1]		[BR]	[1]		
56		[1]		[BR]	[1]		
57		[1]		[BR]	[1]		
58		[1]		[BR]	[1]		
59		[1]		[BR]	[1]		
60		[1]		[BR]	[1]		
61		[1]		[BR]	[1]		
62		[1]		[BR]	[1]		
63		[1]		[BR]	[1]		
64		[1]		[BR]	[1]		
95	[09]			N/A	N/A	N/A	touchpad [1] / [*]
96				N/A	N/A	N/A	touchpad [3] / [#]
99	[07]			N/A	N/A	N/A	touchpad [*] / [#]

NOTES:

Zone Type: see chart on page 12;

Report Code: enabled if first digit is a non-zero number.

Hardwire Type (zns 2-8):

0 = EOL
1 = NC
2 = NO

Input Type:

2 = AW (zones 9-48)
3 = RF (zones 9-48)
4 = UR (zones 9-48)
5 = BR (zones 49-64)

Response Time:

0 = 10msec
1 = 350msec
2 = 700msec
3 = 1.2 sec (can be used to accommodate smoke detectors that require longer response time)

All zones, including duress (zone 92), are enabled for Contact ID® reporting.

Reserved Zones

91 = addressable device report enable/disable default zone type = [05].

92 = Duress report enable/disable

*57 Function Key Programming Worksheet

Option	Function	A			B			C			D			Comments
		P1	P2	com	P1	P2	com	P1	P2	com	P1	P2	com	
01	Paging													
02	Time Display													
03	Arm AWAY													
04	Arm STAY													
05	Arm NIGHT-STAY													
06	Step Arming													
07	Device Activation													Device:
08	Comm. Test													
09	Macro Key 1													Assign each macro key to only a single partition. †
10	Macro Key 2													Assign each macro key to only a single partition. †
11	Macro Key 3													Assign each macro key to only a single partition. †
12	Macro Key 4													Assign each macro key to only a single partition. †
00	Emergency Keys:	zone 95			zone 99			zone 96			paging			
	Personal Emergency													n/a
	Silent Alarm													n/a
	Audible Alarm													n/a
	Fire													n/a
Emergency Keys: A = paired keys [1] / [*] (zone 95); B = paired keys [*] / [#] (zone 99); C = paired keys [3] / [#] (zone 96)														
† There are only four macros system-wide.														

Output Relays/Powerline Carrier Devices (X-10) Worksheet For *79, *80 and *81.

Applicable only if Relays and/or Powerline Carrier Devices are to be used.

*79 RELAY/POWERLINE CARRIER DEVICE (X-10) MAPPING (Must program before using *80)

OUTPUT TYPE				
Relay		X10		
Output No.	Module Addr.	Pos (1-4)	Unit No.	Description
01				
02				
03				
04				
05				
06				
07				
08				

OUTPUT TYPE				
Relay		X10		
Output No.	Module Addr.	Pos (1-4)	Unit No.	Description
09				
10				
11				
12				
13				
14				
15				
16				
17	On-Board Trigger 1			norm output =
18	On-Board Trigger 2			norm output =

*81 ZONE LISTS FOR OUTPUT DEVICES

Fill in the required data on the worksheet below and follow the procedure in the installation manual as you enter the data during the displays and prompts that appear in sequence.

Note: Record desired zone numbers below, noting that a list may include *any* or *all* of system's zone numbers.

List No.	Used For...	Contains These Zones...
01	General Purpose (GP)	
02	General Purpose	
03	Chime-by-Zone or GP	(see field *26 for chime by zone option)
04	Cross Zones or GP	(see field *85 for cross zone timer setting)
05	Night-Stay Zones or GP	
06	Dial Delay Disable or GP	(see field *50 for dial delay disable option)
07	Unlimited Reports or GP	(see field *93 for unlimited reports option)
08	General Purpose	
09	Zones activating pager 1	
10	Zones activating pager 2	
11	Zones activating pager 3	
12	Zones activating pager 4	

*80 OUTPUT DEFINITIONS

Fill in the required data on the worksheet below and follow the programming procedure in the installation manual as you enter the data during the displays and prompts that appear in sequence.

Notes: 1. For Relays, 4229 and 4204 devices are programmed in *79, *80, and *81 modes.

2. For Powerline Carrier devices (plcd), field *27 must be programmed with a House Code.

3. Tamper of expansion units cannot be used to operate devices.

Output Function Number (1-48)	Activation Type and Detail				Partition Number (P) (if using ZT trig) 0 = any 1 = partition 1 2 = partition 2 3 = common	Event (for zone list/activated by)		Action 0 = off 1 = close 2 secs 2 = stay closed 3 = pulse 4 = toggle 5 = duration 1†† 6 = duration 2††	Output Number 1-18= dev	Device Type R = relay T = trigger X = X10
	Activated by 0=delete 1=zn list 2=zn type 3=zn no.	Zone List (ZL) 1-8 = list	Zone Type (ZT) (see table below)	Zone No. (ZN) 00=none 01-64		By Zone List	By Zone No. 0 = restore 1 = alarm/fit/trbl			
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
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36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										

ZONE TYPE/SYSTEM OPERATION – Choices for Zone Types are:

00 = Not Used	05 = Trouble Day/Alarm Night	10 = Interior w/Delay	24 = Silent Burglary
01 = Entry/Exit#1	06 = 24 Hr Silent	12 = Monitor Zone	25 = 24-Hr Non-Alarm
02 = Entry/Exit#2	07 = 24 Hr Audible	14 = Carbon Monoxide§§	77 = Keyswitch
03 = Perimeter	08 = 24 Hr Aux	16 = Fire w/Verification	81 = AAV Monitor Zone
04 = Interior Follower	09 = Fire	23 = No Alarm Response	90-93 = Configurable

§§ when used with an output function, the carbon monoxide zone type activates only upon CO alarms. Does not activate for trouble conditions.

Choices for System Operation are:

20 = Arming–Stay	38 = Chime	58 = Duress
21 = Arming–Away	39 = Any Fire Alarm	60 = AAV Trigger
22 = Disarming (Code + OFF)	40 = Bypassing	61 = AVS/GSMV session begin §
31 = End of Exit Time	41 = **AC Power Failure	62 = AVS/GSMV session end §
32 = Start of Entry Time	42 = **System Battery Low	66 = Function key†
33 = Any Burglary Alarm	43 = Communication Failure	67 = Bell Failure
36 = **At Bell Timeout***	52 = Kissoff	68 = Telco Line Fault
	54 = Fire Zone Reset	78 = Keyswitch red LED†††
		79 = Keyswitch green LED†††

Note: In normal operation mode:

Code + # + 7 + NN Key Entry **starts** Device

Code + # + 8 + NN Key Entry **stops** Device

** Use 0 (any) for Partition No. (P) entry.

*** Or at Disarming, whichever occurs earlier.

† Use *57 Menu mode to assign the function key.

†† Duration is set in program field *177.

††† Device action not used for these choices.

§ automatically set when appropriate AVS Quick Command performed.

Schedules Worksheet (installer code + [#] + [6] [4]; *master code can only access schedules 01-16 and events 00-07*)

No.	Event (see list below)	Device No. for "01" events: enter 01-18	Group No. for "02" events: enter 1-8	Partition for "04-06" events: enter 1, 2, or 3	Start Time/ Days	Stop Time/ Days	Repeat (1-4)	Random (yes/no)
01								
02								
03								
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

Events: Master/Installer

00 = clear event
01 = device on/off
02 = user access
03 = latch key report

04 = forced STAY arm
05 = forced AWAY arm
06 = auto disarm
07 = display "reminder"

Installer Only

10 = display custom words 8-10
11 = periodic test report
12 = up and about (large time window within which time selected in field *175 is monitored)

Repeat Options: 0 = none; 1 = repeat weekly; 2 = repeat every other week; 3 = repeat every third week; 4 = repeat every fourth week

Zone Type Definitions

Type 00	ZONE NOT USED. Use this zone type if the zone is not used.
Type 01 Entry/Exit Burglary #1	<ul style="list-style-type: none"> Assign to zones that are used for primary entry and exit. Provides entry delay if the control is armed in the Away or Stay modes. No entry delay is provided when the panel is armed in the Instant mode. Entry delay #1 is programmable for each partition. Exit delay begins whenever the control is armed, regardless of the arming mode selected, and is independently programmable (field *34).
Type 02 Entry/Exit Burglary #2	<ul style="list-style-type: none"> Assign to zones that are used for entry and exit and require more time than the primary entry/exit point. Provides a secondary entry delay, in same manner as entry delay #1. Entry delay #2 is programmable for each partition. Exit delay is same as described for Type 01.
Type 03 Perimeter Burglary	<ul style="list-style-type: none"> Assign to all sensors or contacts on exterior doors and windows. Provides an instant alarm if the zone is faulted when the panel is armed in the Away, Stay, or Instant modes.
Type 04 Interior Follower	<ul style="list-style-type: none"> Assign to a zone covering an area such as a foyer, lobby, or hallway through which one must pass upon entry (to and from the touchpad). Provides a delayed alarm (using the programmed entry/exit time) if the entry/exit zone is faulted first. Otherwise this zone type gives an instant alarm. Active when the panel is armed in the Away mode. Bypassed automatically when the panel is armed in the Stay or Instant modes.
Type 05 Trouble by Day/ Alarm by Night	<ul style="list-style-type: none"> Assign to a zone that contains a foil-protected door or window (such as in a store), or to a zone covering a sensitive area such as a stock room, drug supply room, etc. Can also be used on a sensor or contact in an area where immediate notification of an entry is desired. Provides an instant alarm if faulted when armed in the Away, Stay, or Instant (night) modes. During the disarmed state (day), the system will provide a latched trouble sounding from the touchpad (and a central station report, if desired).
Type 06 24-hour Silent Alarm	<ul style="list-style-type: none"> Usually assigned to a zone containing an emergency button. Sends a report to the central station but provides no touchpad display or sounding.
Type 07 24-hour Audible Alarm	<ul style="list-style-type: none"> Assign to a zone that has an emergency button. Sends a report to the central station, and provides an alarm sound at the touchpad, and an audible external alarm.
Type 08 24-hour Auxiliary Alarm	<ul style="list-style-type: none"> Assign to a zone containing an emergency button, or to a zone containing monitoring devices such as water or temperature sensors. Sends a report to the central station and provides an alarm sound at the touchpad. (No bell output is provided.)
Type 09 Fire	<ul style="list-style-type: none"> Provides a fire alarm on short circuit and a trouble condition on open circuit. A fire alarm produces a pulsing bell output. This zone type is always active and cannot be bypassed. Note: Hardwired zone 1 should be used with 2-wire smoke detectors; zones 2-8 can be used with 4-wire smoke detectors; any wireless zone can be used as a fire zone.
Type 10 Interior w/Delay	<ul style="list-style-type: none"> Provides entry delay (using the programmed entry time), if tripped when the panel is armed in the Away mode. Entry Delay begins whenever sensors in this zone are violated, regardless of whether or not an entry/exit delay zone was tripped first. Bypassed when the panel is armed in the Stay or Instant modes.
Type 12 Monitor Zone	<ul style="list-style-type: none"> Works as a dynamic monitor of a zone fault/trouble. In the case of a short/open, the message, "ALARM-24 Hr. Non-Burg. -#XXX" (where XXX is the zone number) will be sent to the Central Station. The system touchpad will display a "check" message indicating the appropriate zone (but touchpad beeping does not occur). Upon restoral of the zone, the message, "RESTORE-24 Hr. Non-Burg. -#XXX" will be sent to the Central Station. The "check" message will automatically disappear from the touchpad dynamically when the zone restores; a user code + off sequence is not needed to reset the zone. Faults of this zone type are independent of the system, and can exist at the time of arming without interference. Since this is a "trouble" zone type, do not use this zone type with relays set to activate upon "alarm."
Type 14 Carbon Monoxide	<ul style="list-style-type: none"> Assigned to any zone with a carbon monoxide detector. Produces touchpad and detector sounding (does not affect bell output) when this zone type is alarmed. Always active and cannot be bypassed.
Type 16 Fire w/Verification	<ul style="list-style-type: none"> Provides a fire alarm when zone is shorted, but only after alarm verified. System verifies alarm by resetting zones for 12 seconds after short is detected. A subsequent short circuit within 90 seconds triggers fire alarm. Provides a trouble response when zone is open.

Type 20 Arm-Stay	<ul style="list-style-type: none"> Arms the system in Stay mode when the zone is activated. Pushbutton units send the user number to the central station when arming or disarming. User code for button must be assigned.
Type 21 Arm-Away	<ul style="list-style-type: none"> Arms the system in Away mode when the zone is activated. Pushbutton units send the user number to the central station when arming or disarming. User code for button must be assigned.
Type 22 Disarm	<ul style="list-style-type: none"> Disarms the system when the zone is activated. User code for button must be assigned.
Type 23* No Alarm Response	<ul style="list-style-type: none"> Can be used on a zone when an output relay action is desired, but with no accompanying alarm (e.g., lobby door access).
Type 24 Silent Burglary	<ul style="list-style-type: none"> Usually assigned to all sensors or contacts on exterior doors and windows where bells and/or sirens are NOT desired. Provides an instant alarm, with NO audible indication at any touchpad or external sounder, if the zone is faulted when the system is armed in the Away, Stay, or Instant, modes. A report is sent to the central station.
Type 25* 24-Hour Non-Alarm	<ul style="list-style-type: none"> For use with sensors designed to provide a trouble display (but no trouble sounding) when an oil tank is low, or other similar application for critical condition monitoring where a non-alarm response is required. When this zone type is faulted and remains faulted for the programmed time duration (field *53), a special event message is sent to the central monitoring station. The same holds true for restoration.
Type 77 Keyswitch	<ul style="list-style-type: none"> Assign to zone wired to a keyswitch.
Type 81 AAV Monitor Zone	<ul style="list-style-type: none"> Assign to zone connected to AAV module. Monitors 2-way voice sessions as follows: <ul style="list-style-type: none"> When the zone is faulted, all alarm sounding and dialer reporting stops, except for fire alarms, which immediately terminate the voice session and cause a fire report to be sent. When the zone is restored (session ended), sounding resumes (if bell timeout has not expired) and reports that were stopped are sent.
Types 90-93 Installer Defined	<ul style="list-style-type: none"> These zone types can be programmed for various custom responses. See data fields *182-*185. Types 92 and 93 can only be programmed via the downloader. <p>UL: Zone types 90-93 may not be used as fire or burglary zones in fire or UL burglar alarm installations.</p>

*The system can still be armed when these zone types are in a faulted condition.

Table of Device Addresses

This Device	Uses Address	Reports as†	Enabled By...
RF Receiver	00	100	*56 zone programming: input device type entry
AUI 1 (touchscreen)	01	n/a	automatic if AUI enable field *189 enabled for AUI 1
AUI 2 (touchscreen)	02	n/a	automatic if AUI enable field *189 enabled for AUI 2
AUI 3 (touchscreen)	05	n/a	automatic if AUI enable field *189 enabled for AUI 3
AUI 4 (touchscreen)	06	n/a	automatic if AUI enable field *189 enabled for AUI 4
Communication Device (LRR)	03	103	automatic if communication device enabled in *29 menu mode
4286 Voice Module	04	104	automatic if phone module access code field *28 enabled
Zone Expanders (4219/4229): module 1 (for zones 09 - 16) module 2 (for zones 17 - 24) module 3 (for zones 25 - 32) module 4 (for zones 33 - 40) module 5 (for zones 41 - 48)	07 08 09 10 11	107 108 109 110 111	*56 zone programming: input device type, entry 2, then: automatic if zone no. 9-16 entered as AW type or relay assigned automatic if zone no. 17-24 entered as AW type or relay assigned automatic if zone no. 25-32 entered as AW type or relay assigned automatic if zone no. 33-40 entered as AW type or relay assigned automatic if zone no. 41-48 entered as AW type or relay assigned
Relay Modules (4204): module 1 module 2 module 3 module 4	12 13 14 15	112 113 114 115	*79 output device programming: device address prompt: entered at device address prompt entered at device address prompt entered at device address prompt entered at device address prompt
Touchpads: touchpad 1 touchpad 2 touchpad 3 touchpad 4 touchpad 5 touchpad 6 touchpad 7 touchpad 8	16 17 18 19 20 21 22 23	n/a n/a n/a n/a n/a n/a n/a n/a	data field programming as listed below: always enabled for partition 1, all sounds enabled. data field *190 data field *191 data field *192 data field *193 data field *194 data field *195 data field *196
5800TM Module	28	n/a	automatic

† Addressable devices are identified by "1" plus the device address when reporting. Enter report code for zone 91 to enable addressable device reporting (default = reports enabled). See field *199 for addressable device (ECP) 3-digit/2-digit identification touchpad display options.

Alpha Vocabulary List (For Entering Zone Descriptors)

000 (Word Space)	• 057 DOOR *	– L –	155 RADIO	209 VALVE
– A –	• 059 DOWN	• 106 LAUNDRY *	• 156 REAR	210 VAULT
• 001 AIR	• 060 DOWNSTAIRS	• 107 LEFT	157 RECREATION	212 VOLTAGE
• 002 ALARM *	061 DRAWER	108 LEVEL	159 REFRIGERATION	– W –
004 ALLEY	• 062 DRIVEWAY	• 109 LIBRARY *	160 RF	213 WALL
005 AMBUSH	• 064 DUCT	• 110 LIGHT	• 161 RIGHT	214 WAREHOUSE
• 006 AREA	– E –	111 LINE	• 162 ROOM *	• 216 WEST
• 007 APARTMENT	• 065 EAST	• 113 LIVING *	163 ROOF	• 217 WINDOW *
• 009 ATTIC *	066 ELECTRIC	• 114 LOADING	– S –	• 219 WING
010 AUDIO	067 EMERGENCY *	115 LOCK	164 SAFE	220 WIRELESS
– B –	068 ENTRY	116 LOOP	165 SCREEN	– X –
• 012 BABY *	• 069 EQUIPMENT	117 LOW	166 SENSOR	222 XMITTER
• 013 BACK *	• 071 EXIT *	• 118 LOWER	• 167 SERVICE	– Y –
• 014 BAR	072 EXTERIOR	– M –	• 168 SHED *	223 YARD
• 016 BASEMENT *	– F –	• 119 MACHINE	169 SHOCK	– Z –
• 017 BATHROOM *	• 073 FACTORY	121 MAIDS	• 170 SHOP *	224 ZONE (No.)
• 018 BED	075 FAMILY	122 MAIN *	171 SHORT	• 225 ZONE *
• 019 BEDROOM *	• 076 FATHERS	• 123 MASTER *	• 173 SIDE *	• 226 0
020 BELL	• 077 FENCE	• 125 MEDICAL *	174 SKYLIGHT	• 227 1
• 021 BLOWER	• 079 FIRE *	126 MEDICINE	175 SLIDING *	• 228 1ST *
• 022 BOILER	• 080 FLOOR *	128 MONEY	• 176 SMOKE *	• 229 2
023 BOTTOM	081 FLOW	129 MONITOR	• 178 SONS	• 230 2ND *
025 BREAK	082 FOIL	• 130 MOTHERS	• 179 SOUTH	• 231 3
• 026 BUILDING	• 083 FOYER	• 131 MOTION *	180 SPRINKLER	• 232 3RD *
– C –	084 FREEZER	132 MOTOR	• 182 STATION	• 233 4
028 CABINET	• 085 FRONT *	– N –	184 STORE	• 234 4TH
• 029 CALL	– G –	• 134 NORTH	• 185 STORAGE *	• 235 5
030 CAMERA	• 089 GARAGE *	135 NURSERY	186 STORY	• 236 5TH
031 CAR	• 090 GAS	– O –	190 SUPERVISED *	• 237 6
033 CASH	091 GATE	• 136 OFFICE *	191 SUPERVISION	• 238 6TH
034 CCTV	• 092 GLASS	• 138 OPEN *	192 SWIMMING	• 239 7
035 CEILING	093 GUEST	139 OPENING	193 SWITCH	• 240 7TH
036 CELLAR	094 GUN	• 140 OUTSIDE	– T –	• 241 8
• 037 CENTRAL	– H –	142 OVERHEAD	194 TAMPER	• 242 8TH
038 CIRCUIT	• 095 HALL *	– P –	196 TELCO	• 243 9
• 040 CLOSED *	• 096 HEAT	143 PAINTING	197 TELEPHONE	• 244 9TH
• 046 COMPUTER	098 HOLDUP	• 144 PANIC *	• 199 TEMPERATURE	245 Custom Word #1
047 CONTACT	099 HOUSE *	145 PASSIVE	200 THERMOSTAT	246 Custom Word #2
– D –	100 INFRARED	• 146 PATIO *	• 201 TOOL	247 Custom Word #3
• 048 DAUGHTERS	• 101 INSIDE *	147 PERIMETER	202 TRANSMITTER	248 Custom Word #4
049 DELAYED	102 INTERIOR	• 148 PHONE	– U –	249 Custom Word #5
• 050 DEN *	103 INTRUSION	150 POINT	• 205 UP	250 Custom Word #6
051 DESK	– J –	151 POLICE *	• 206 UPPER	251 Custom Word #7
• 052 DETECTOR *	104 JEWELRY	152 POOL *	• 207 UPSTAIRS *	252 Custom Word #8
• 053 DINING *	– K –	• 153 POWER	• 208 UTILITY *	253 Custom Word #9
054 DISCRIMINATOR	• 105 KITCHEN	*		254 Custom Word #10
055 DISPLAY				

Note: Bulleted (•) words in **boldface type** are those that are also available for use by the 4286 Phone Module. If using a Phone module, and words other than these are selected for Alpha descriptors, the module will not provide annunciation of those words.

Italicized words followed by an asterisk indicate those words supported by the 6160VADT Voice Touchpads

CHARACTER (ASCII) CHART (For Adding Custom Words)

32 (space)	41)	50 2	59 ;	68 D	77 M	85 U
33 !	42 *	51 3	60 <	69 E	78 N	86 V
34 "	43 +	52 4	61 =	70 F	79 O	87 W
35 #	44 ,	53 5	62 >	71 G	80 P	88 X
36 \$	45 –	54 6	63 ?	72 H	81 Q	89 Y
37 %	46 .	55 7	64 @	73 I	82 R	90 Z
38 &	47 /	56 8	65 A	74 J	83 S	
39 '	48 0	57 9	66 B	75 K	84 T	
40 (49 1	58 :	67 C	76 L		

SYSTEM INSTALLATION NOTES

General Information

- Touchpads must be set for addresses 16-23 (first touchpad is address 16, which is different from previous controls) and programmed in data fields *190-*196.
- Zone Expander Modules must be set for specific addresses (07-11), based on the zone numbers used (see table of addresses in *Installation and Setup Guide, K5305V3*).
- 4204 Relay Modules must be set for specific addresses (12-15).

For Canadian Installations:

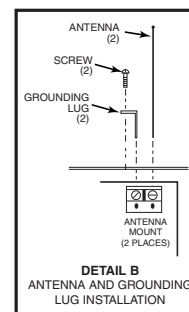
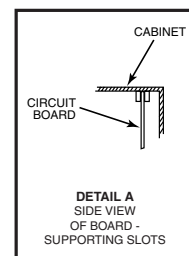
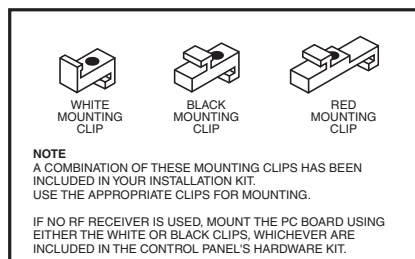
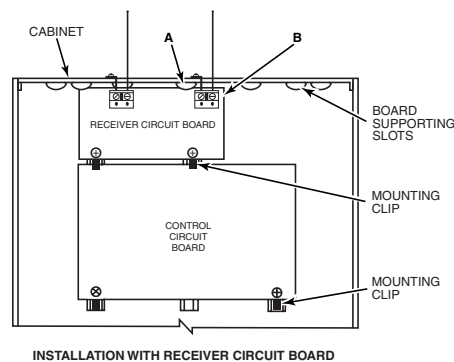
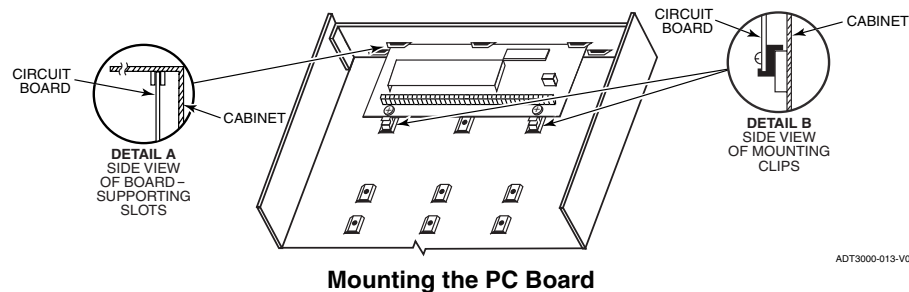
- All devices and accessories used in a Canadian installation must be Listed for use in Canada.
- Wiring is to be in accordance with the Canadian Electric Code, Part I, the Standard for Installation and Classification of Burglar Alarm Systems for Financial and Commercial Premises, Safes, and Vaults, CAN/ULC-S302, and the Standard for the Installation of Residential Fire Warning Systems, CAN/ULC-S540.

Mounting

1. Hang two short mounting clips (provided) on the raised cabinet tabs (see Detail B in Fig. 2).
2. a. Insert the top of the circuit board into the slots at the top of the cabinet. Make sure that the board rests on the correct row (see Detail A).
- b. Swing the base of the board into the mounting clips and secure the board to the cabinet with the accompanying screws (see Detail B).

Notes

- Before installing the cabinet's contents, remove the metal cabinet knockouts required for wiring entry. Do not remove the knockouts after the circuit board has been installed.



Mounting the PC Board and RF Receiver

Touchpads

Touchpads powered from supplies that do not have a backup battery will not function if AC power is lost. Make sure to power at least one touchpad in each partition from the control's auxiliary power output.

UL: Use a UL Listed, battery-backed supply for UL installations. The battery supplies power to these touchpads in case of AC power loss.
The battery-backed power supply should have enough power to supply the keypads with the UL required minimum standby power time.

Sounder

For supervised output:

Cut the red Bell Supervision Jumper located above terminals 2 and 3 on the control board.

Connect a 2k ohm resistor across the terminals of the last sounder.

UL:

- Use only UL Listed sounding devices for UL installations.
- Bell supervision is required for fire alarm installations.
- The total current drawn from the alarm output and the auxiliary power output, combined, cannot exceed 600 mA. In addition, the sounding device must be a UL Listed audible signal appliance rated to operate in a 10.2-13.8 VDC voltage range, and must be mounted indoors.

Earth Ground

Metal Cold Water Pipe:

Use a non-corrosive metal strap (copper is recommended) firmly secured to the pipe to which the ground lead is electrically connected and secured.

AC Power Outlet Ground:

Available from 3-prong, 120VAC power outlets only. To test the integrity of the ground terminal, use a 3-wire circuit tester with neon lamp indicators, such as the UL Listed Ideal Model 61-035, or equivalent, available at most electrical supply stores.

Notes

- This product has been designed and laboratory-tested to ensure its resistance to damage from generally expected levels of lightning and electrical discharge, and does not normally require an earth ground.
- If an earth ground is desired for additional protection in areas of severe electrical activity, terminal 25 on the control board, or the cabinet, may be used as the ground connection point. The examples of good earth grounds listed above are available at most installations.

Hardwire Zones

Normally Closed Zones/Normally Closed EOLR Zones

1. Connect closed circuit devices in series in the high (+) side of the loop; for EOLR zones, connect the EOLR in series following the last device.
2. Enable normally closed/EOLR zones using Zone Programming mode, "Hardwire Type" prompt.

Notes

- **EOLR:** If the EOLR is not at the end of the loop, the zone will not be properly supervised, and the system may not respond to an open circuit on the zone.
- Zone 1 is intended for EOLR only.

UL: For UL commercial burglar alarm installations, use EOLR zones.

4-Wire Smoke Detectors

- Connect up to 16 (depending on detector current draw) 4-wire smoke detectors to any zone 2-8. This control does not automatically reset power to 4-wire smoke detector zones, so you must use a relay (e.g., 4204, 4229), or on-board trigger** to reset power (also required for fire verification). Do this by programming the designated relay/trigger as zone type 54 (fire zone reset); see On-Board Trigger section for other information.

** Maximum current for trigger 17 output for 4-wire smoke detectors is 100mA.

SIA Installations: If using fire verification on zones other than zone 1, UL Fire Alarm Listed relay accessories must be used to reset power as shown on the Summary of Connection label.

- The zone 1 alarm current supports only one smoke detector in the alarmed state.
- Do not use 4-wire smoke detectors on zone 1.

RF Receiver

Use any 5800 Series Wireless Receivers, such as:

RF Receiver	No. of Zones
5881L/5882L	up to 8
5881M/5882M	up to 16
5881H/5882H	up to 40 plus 16 button zones
5883, 6150RFADT	

Zone Nos.: transmitters = 9-48; buttons = 49-64

1. Set Device Address to "00" as described in its instructions (set all switches to the right, "off" position).
2. Mount the receiver, noting that the RF receiver can detect signals from transmitters within a nominal range of 200 feet.
3. Connect the receiver's wire harness to the control's touchpad terminals. Plug the connector at the other end of the harness into the receiver. Refer to the installation instructions provided with the receiver for further procedures regarding antenna mounting, etc.

5800TM Module

1. Mount the 5800TM next to the RF receiver (between one and two feet from the receiver's antennas) using its accompanying mounting bracket. Do not install within the control cabinet.
2. Connect the 5800TM to the control panel's touchpad connection terminals as shown on the Summary of Connections diagram and set to address 28.
3. For additional information, refer to the 5800TM's instructions.

Notes

- Use this module only if you are using one or more wireless bi-directional touchpads or keyfobs with a wireless Receiver; 5800TM is not necessary if using a Transceiver (e.g., 5883).
- The 5800TM must be set to address 28 (cut red-W1 jumper).
- The 5800TM can be used in partition 1 only.
- For additional information regarding the 5800TM, refer to the 5800TM's instructions.

Transmitters

ULC Note for Canadian Units: In accordance with ULC standards, the RF supervision period for this control is three hours for Fire zones (Zone Types 9 and 16) and 12 hours for all other zone types.

UL: The following transmitters are not intended for use in UL installations: 5802MN, 5802MN2, 5804, 5804BD, 5814, 5816TEMP, 5819, 5819WHS & BRS, and 5850.
The 5827BD and 5800TM can be used in UL Listed Residential Burglar installations.

Transmitter Battery Life

- Batteries in the wireless transmitters may last from 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. Factors such as humidity, extreme temperatures, as well as large temperature variations may all reduce the actual battery life in a given installation. The wireless system can identify a true low-battery situation, thus allowing the dealer or user of the system time to arrange a change of battery and maintain protection for that given point within the system.
- Some transmitters (e.g., 5802 and 5802CP) contain long-life but non-replaceable batteries, and no battery installation is required. At the end of their life, the complete unit must be replaced (and a new serial number enrolled by the control).
- Button-type transmitters (such as 5801, 5802, and 5802CP) should be periodically tested for battery life.
- The 5802MN and 5804 Button Transmitters have replaceable batteries.

Do not install batteries in wireless transmitters until you are ready to enroll during system programming. After enrolling, batteries need not be removed.

- All of the transmitters illustrated below have one or more unique factory assigned input (loop) ID codes. Each of the input loops requires its own programming zone (e.g., a 5804's four inputs require four programming zones).



UL NOTE: The following transmitters are not intended for use in UL installations:

5802, 5802MN, 5802MN2, 5804E, 5804BD, 5814, 5816TEMP, 5819, 5819WHS & BRS, and 5850.

Keyswitch

1. Connect the 4146 keyswitch's normally open momentary switch to a zone's terminals. Remove the 2000 ohm EOL resistor if connected across the selected zone.
2. Using a standard touchpad cable as shown:
Connect the yellow and white keyswitch wires to trigger connector pin 3 (+12V).
Connect the Red and Green LED wires to the appropriate output 17/output 18 trigger connector pins.
3. Connect a 2000 ohm EOL resistor across the momentary switch.
4. You can wire an optional closed-circuit tamper switch (model 112) in series with the zone. If the switchplate is then removed from the wall, the tamper will open, disabling keyswitch operation until the system is next disarmed from the keypad.
If the tamper is opened when the system is armed, an alarm will occur.

UL:

A UL Listed keyswitch is required for fire installations and UL commercial and residential burglar alarm installations.

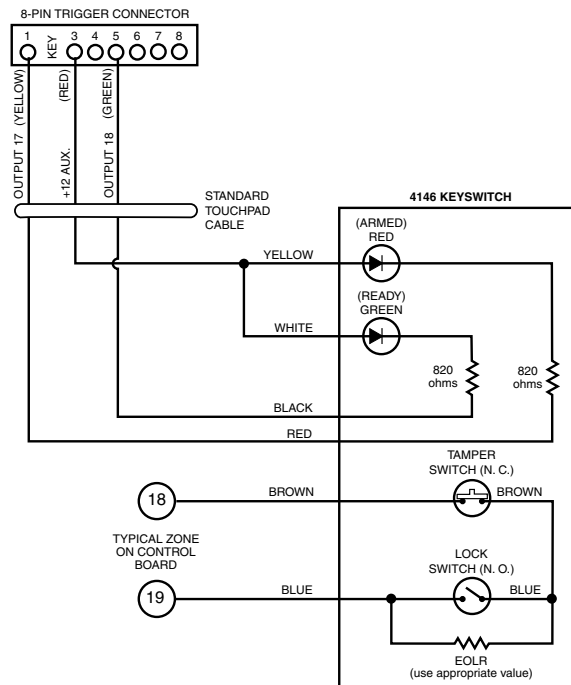
If a keyswitch is used on:

- an installation that transmits opening and closing signals, the keyswitch zone must be programmed to send opening and closing signals.
- a UL commercial burglar alarm installation, the keyswitch's tamper switch must be connected in to the alarm system. This tamper switch zone must also be programmed for Zone Type 05 – Trouble by Day / Alarm by Night.
- a fire alarm installation, the keyswitch must be located next to an alphanumeric display keypad.

The Ademco 4146 keyswitch is UL Listed.

Notes

- Use only one keyswitch per partition.
- When using a keyswitch, the zone it is connected to is no longer available for use as a protective zone.
- Use *56 Menu mode to program the keyswitch zone and assign it zone type 77.
- Use *80 Menu mode to program the LED functions: program outputs 17 and 18 for system operation zone type 78 (red LED) and 79 (green LED) as appropriate (see **Output Device Programming** section).



ADT3000-012-V0

Keyswitch Wiring Connections

Powerline Carrier Devices

UL: Powerline Carrier devices and the 4300 Transformer are not UL Listed for fire or burglary functions and are intended for home automation.

On-Board Triggers

UL: If on-board triggers are used, the wiring between the control unit and the UL Listed device must be run in conduit, be no more than 3 feet apart and have no intervening barriers or walls.

Phone Line/Phone Module Connections

UL: The 4285 and 4286 modules are UL Listed only for use on residential fire and UL residential burglar alarm installations.

Audio Alarm Verification Connections

UL: UL installations using the AAV feature must use the ADEMCO UVCM module (part of the ADEMCO UVS system).

Various System Trouble Displays

Alpha Display	Fixed Disp.	Meaning
CHECK	CHECK	indicates that a problem exists with the displayed zone(s) and requires attention.
SYSTEM LO BAT	BAT	with no zone number indicates that the system's main standby battery is weak.
LO BAT	BAT	with a zone number and a once-per-minute beeping at the touchpad indicates that a low-battery condition exists in the wireless sensor displayed (zone "00" indicates a wireless touchpad). If the battery is not replaced within 30 days, a "CHECK" display may occur. Some wireless sensors use a non-replaceable long-life battery which requires replacement of the entire unit at the end of battery life (e.g., 5802, 5802CP).
no display	no display	Power Failure If there is no touchpad display at all and the LEDs are unlit, operating power (AC and battery) for the system has stopped and the system is inoperative. If the message "AC LOSS" (Custom English display) or "NO AC" (English display) is displayed, the touchpad is operating on battery power only. If the battery standby capacity is used up during a prolonged AC power outage, the control's power will shut down to minimize deep discharge of the battery.
Comm. Failure	FC	A communication failure has occurred.

Test Procedures

After the installation is complete, you should perform the following tests:

System Test:	Checks that all zones have been installed properly and the system properly responds to faults.
Dialer Test:	Checks that the phone connection to the central station is working properly.
Go/No Go Test:	Checks that transmissions can be received from transmitters. Should be performed before permanently mounting transmitters.
RF Sniffer Mode:	Checks that RF transmitter serial numbers have been properly entered into the system.
Battery Tests:	Automatic battery tests are performed by the system. See Automatic Battery Test paragraph for details.

System Test

NOTE: Test mode can be entered from any keypad. However, faulted zones appear only on those keypads assigned to the partition to which the zone is assigned (i.e., partition 1 zones appear only on partition 1 keypads, etc.). To see another partition's faulted zones, view a keypad assigned to that partition or use the GOTO command (code +[*] + partition number 0-3, where 0 is the keypad's home partition).

With the system in the disarmed state, check that all zones are intact (not faulted). Doors and windows with contacts should be closed, PIRs should be covered (use a cloth to mask them temporarily if necessary). If a "NOT READY" message is displayed, press [*] to display the faulted zone(s). Restore faulted zone(s) if necessary, so that the "READY" message is displayed.

1. Enter Installer Code + 5 [TEST], then press "0" at the prompt to start Walk Test mode.

1=DIAL, 0=WALK

(no special display on English Display Touchpads; displays "DISARMED READY TO ARM")

The following will appear on the initiating touchpad and a Contact ID report is sent (code 607):

TEST IN PROGRESS

("dd" displayed on English Display Touchpads)

2. Upon entering the system test mode, the outside sounder should sound for 1 second.

If the backup battery is discharged or missing, the sounder may not turn on and a "LOW BATTERY" report will be transmitted with a "TEST" report.

The touchpad will beep once about every 30 seconds as a reminder that the system is in the Test mode.

NOTE: Wireless motion detectors (Passive Infrared units) will send signals out only if they have been inactive for 3 minutes (conserves battery life).

3. Test all sensors using the procedure described in the User's Guide "Testing the System" section.
4. After checking sensors, turn off the test mode by entering installer code + OFF.

NOTE: Test mode automatically ends after 4 hours. During the final 5 minutes (after 3 hours 55 minutes of Test mode), the touchpad emits a double-beep every 30 seconds to alert that the end of Test mode is nearing.

Checking Transmitter Enrollment (Sniffer Mode)

Use this mode to verify that all transmitters have been properly programmed. Make sure both partitions are disarmed before trying to enter this mode, since this is a system-wide command.

1. From a touchpad in partition 1, press [Installer code] + [#] + 3.

NOTE: If the communicator is in the process of sending a report to the central station, the system will not go into the Sniffer mode. If so, wait a few minutes, and try again.

The touchpads in both partitions will display all zone numbers of wireless units (in both partitions) programmed into the system. Fault each transmitter in turn, causing each one to send a signal. As the system receives a signal from each of the transmitters, the zone number of that transmitter disappears from the display.

2. After all transmitters have been checked, exit the sniffer mode by keying [Installer code (6321)] + OFF.

IMPORTANT: Sniffer mode does not automatically expire. You must manually exit Sniffer mode (by entering [Installer code] + OFF) to return to normal operation.

Notes:

- All BR type units must physically be activated to clear the display.
- When **one** button of a transmitter (RF, UR, or BR) is activated, all zones assigned to other buttons on that transmitter are cleared. This also applies to 5816 and 5817 transmitters, which have multiple loops (zones).
- Any transmitter that is not "enrolled" will not turn off its zone number.

Go/No Go Test Mode

The Go/No Go Test verifies adequate RF signal strength from the proposed transmitter location, and allow you to reorient or relocate transmitters if necessary, before mounting the transmitters permanently. This mode is similar to the Transmitter Test mode, except that the wireless receiver gain is reduced. This will enable you to make sure that the RF signal from each transmitter is received with sufficient signal amplitude when the system is in the normal operating mode.

1. Enter **[Installer code (6321)] + [#] + 4** from the partition being tested. For multi-partition systems, repeat this test for each partition.
2. After you have placed transmitters in their desired locations and the approximate length of wire to be run to sensors is connected to the transmitter's screw terminals (if used), fault each transmitter. Do not conduct this test with your hand wrapped around the transmitter, as this will cause inaccurate results.
 - a. The touchpad will beep three times to indicate signal reception and display the appropriate zone number.
 - b. If the touchpad does not beep, you should reorient or move the transmitter to another location. Usually a few inches in either direction is all that is required.
4. If each transmitter produces the proper touchpad response when it is faulted, you can then permanently mount each of the transmitters according to the instructions provided with them.
5. Exit the Go/No Go Test mode by entering: **[any user code (partition specific)] + OFF**.

Dialer Communication Test and Periodic Test Reports

1. Enter Installer Code + 5 [TEST], then press "1" at the prompt to start the Dialer Test (checks phone line integrity only; does not confirm report transmissions).

1=DIAL, 0=WALK

(no special display on English Display Touchpads; displays "DISARMED READY TO ARM")

The following will be displayed (accompanied by 2 beeps) if test is successful:

PHONE OKAY

("Cd" displayed on English Display Touchpads)

A Contact ID report will also be sent (code 601)

If the dialer test is unsuccessful, the following is displayed:

COMM FAILURE

("FC" displayed on English Display Touchpads)

2. Enter Installer code + OFF to clear the display and exit.

Automatic Periodic Test Report

The system can be set to automatically send test reports (enabled in field *64; Contact ID code 602) at specified intervals.

Frequency of the reports is set in Scheduling mode (event 11).

To ensure that test reports are sent at the times expected, set the Real-Time Clock to the proper time **before** entering the test report schedule command.

Automatic Standby Battery Tests

1. An automatic test is conducted every 3 minutes to ensure that a standby battery is present and properly connected. If a battery is not present or is not properly connected, a "LOW BATTERY" message is displayed and, if so programmed, will be reported to the central station.
2. A battery capacity test is automatically conducted for 2 minutes every 4 hours, beginning 4 hours after exiting the Programming mode or after powering up the system. In addition, entry into the Test mode will also cause a battery capacity test to be initiated. If the battery cannot sustain a load, a "Low Battery" message is displayed and, if so programmed, will be reported to the central station.

Specifications & Accessories

Security Control

Physical: 12-1/2" W x 14-1/2" H x 3" D (318mm x 368mm x 76mm)

Electrical:

VOLTAGE INPUT: 16.5VAC from plug-in 25VA transformer, Ademco No. 1321 (1321CN in Canada)

POWER SHUTDOWN NOTE: System shuts down sensor protection processing if control's voltage drops below 9.6V.

RECHARGEABLE BACKUP BATTERY: 12VDC, 17AH (sealed lead acid type). Charging Voltage: 13.8VDC.

ALARM SOUNDER: 12V, 2.0 Amp output can drive 12V BELLS or can drive one or two 702 (series connected) self-contained 20-watt sirens. Do **not** connect two 702s in parallel.

AUXILIARY POWER OUTPUT: 12VDC, 600mA max.

UL installations: Alarm Sounder plus Auxiliary Power currents should not exceed 600mA total.

STANDBY TIME: (see *Section 12: Final Power-Up*)

FUSE: Battery (3A) No. 90–12 (PC board may have a PTC device instead of a fuse. The PTC serves as an automatically resetting fuse.)

Communication:

Ademco Contact ID Reporting: 10 characters/sec., DTMF (TouchTone) Data Tones, 1400/2300Hz ACK, 1400Hz KISSOFF.

LINE SEIZE: Double Pole

FCC REGISTRATION No.: 5GBUSA-44003-AL-E

RINGER EQUIVALENCE: 0.1B

Maximum Zone Resistance: Zones 1–8 = 300 ohms excluding EOLR standard zones

Compatible Devices

Touchpads: 6150ADT, 6160ADT, 6160VADT; Touchpad Transceivers: 6150RFADT, 6160RF 6270ADT Touch Screen Touchpad; iCenter Advanced User Interface

RF Receivers: 5881L/5882L: accepts up to 8 transmitters
5881M/5882M: accepts up to 16 transmitters
5881H/5882H: accepts up to system maximum transmitters
5800TM Transmitter Module (used with wireless 2-Way devices)

RF Transceivers: 5883M (accepts up to 16 transmitters); 5883H (accepts up to system max. transmitters)

Zone Expansion: 4219 WIRED EXPANSION MODULE
4229 WIRED EXPANSION/RELAY MODULE

Relay Module: 4204 RELAY MODULE

Phone Modules: 4286VIP PHONE MODULE

Long Range Radio: 7835C/7845C, 7845GSMADT

2-Wire Smoke Detector:

Detector Type	System Sensor Model No.
Photoelectric w/heat sensor, direct wire	2300TB
Photoelectric, direct wire	2400
Photoelectric w/heat sensor, direct wire	2400TH
Photoelectric	2451 w/B401B base
Photoelectric w/heat sensor	2451TH w/B401B base
Ionization, direct wire	1400
Ionization	1451 w/B401B base
Photoelectric duct detector	2451 w/DH400 base
Ionization duct detector	1451D w/DH400 base H
Low-profile, Photoelectric, w/135°F thermal	2100T
Low-profile, Ionization type, direct wire	1100

Transformers: 1321: 16.5VAC, 25VA Plug-In Transformer (No. 1321CN in Canada)

1361X10: 16.5VAC, 40VA Powerline Carrier Device Interface AC Transformer

Sounders:	AB12M 10" Motorized Bell & Box	749 Speaker/Horn
	1011BE12M 10" Motorized Bell & Box	744 Siren Driver
	702 Outdoor Siren	745X3 Voice Siren Driver
	719 2-Channel Siren	705-820, 5-inch Round Speaker
	713 High Power Speaker	713 Speaker
	746 Indoor Speaker	WAVE Speaker
	747 Indoor Siren	WAVE2 Two-Tone Siren
	747PD Two-Tone Piezo Dynamic Indoor Siren	WAVE2PD Two-Tone Piezo Siren
	747UL Indoor Siren	5800WAVE Wireless Siren
	748 Dual Tone Siren	
	System Sensor PA400B (beige)/; PA400R (red) Indoor Piezo Sounder	

RECOMMENDATIONS FOR PROPER PROTECTION

The Following Recommendations for the Location of Fire and Burglary Detection Devices Help Provide Proper Coverage for the Protected Premises.

Recommendations For Smoke And Heat Detectors

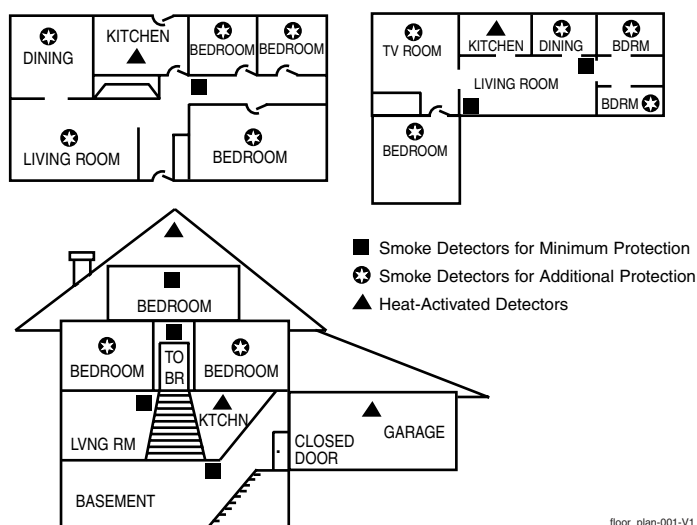
With regard to the number and placement of smoke/heat detectors, we subscribe to the recommendations contained in the National Fire Protection Association's (NFPA) Standard #72 noted below.

Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: For minimum protection a smoke detector should be installed outside of each separate sleeping area, and on each additional floor of a multi-floor family living unit, including basements. *The installation of smoke detectors in kitchens, attics (finished or unfinished), or in garages is not normally recommended.*

For additional protection the NFPA recommends that you install heat or smoke detectors in the living room, dining room, bedroom(s), kitchen, hallway(s), attic, furnace room, utility and storage rooms, basements and attached garages.

In addition, we recommend the following:

- Install a smoke detector inside every bedroom where a smoker sleeps.
- Install a smoke detector inside every bedroom where someone sleeps with the door partly or completely closed. Smoke could be blocked by the closed door. Also, an alarm in the hallway outside may not wake up the sleeper if the door is closed.



- Install a smoke detector inside bedrooms where electrical appliances (such as portable heaters, air conditioners or humidifiers) are used.
- Install a smoke detector at both ends of a hallway if the hallway is more than 40 feet (12 meters) long.
- Install smoke detectors in any room where an alarm control is located, or in any room where alarm control connections to an AC source or phone lines are made. If detectors are not so located, a fire within the room could prevent the control from reporting a fire or an intrusion.

THIS CONTROL COMPLIES WITH NFPA REQUIREMENTS FOR TEMPORAL PULSE SOUNDING OF FIRE NOTIFICATION APPLIANCES.

FCC/INDUSTRY CANADA

FEDERAL COMMUNICATIONS COMMISSION (FCC) PART 15 STATEMENTS

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

CLASS B DIGITAL DEVICE STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

INDUSTRY CANADA (IC) STATEMENTS

This device complies with RSS210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC/INDUSTRY CANADA (continued)

TELEPHONE/MODEM INTERFACE

FCC Part 68

This equipment complies with Part 68 of the FCC rules. On the front cover of this equipment is a label that contains the FCC registration number and Ringer Equivalence Number (REN). You must provide this information to the telephone company when requested.

This equipment uses the following USOC jack: RJ31X

This equipment may not be used on telephone-company-provided coin service. Connection to party lines is subject to state tariffs. This equipment is hearing-aid compatible.

Industry Canada

NOTICE: The Industry Canada Label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves but should contact appropriate electric inspection authority, or electrician, as appropriate.

Ringer Equivalence Number Notice:

The **Ringer Equivalence Number** (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.

Industrie Canada

AVIS: L'étiquette d'Industrie Canada identifie le matériel homologué. Cette étiquette certifie que le matériel est conforme aux normes de protection, d'exploitation et de sécurité des réseaux de télécommunications, comme le prescrivent les documents concernant les exigences techniques relatives au matériel terminal. Le Ministère n'assure toutefois pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

Avant d'installer ce matériel, l'utilisateur doit s'assurer qu'il est permis de le raccorder aux installations de l'entreprise locale de télécommunication. Le matériel doit également être installé en suivant une méthode acceptée de raccordement. L'abonné ne doit pas oublier qu'il est possible que la conformité aux conditions énoncées ci-dessus n'empêche pas la dégradation du service dans certaines situations.

Les réparations de matériel homologué doivent être coordonnées par un représentant désigné par le fournisseur. L'entreprise de télécommunications peut demander à l'utilisateur de débrancher un appareil à la suite de réparations ou de modifications effectuées par l'utilisateur ou à cause de mauvais fonctionnement.

Pour sa propre protection, l'utilisateur doit s'assurer que tous les fils de mise à la terre de la source d'énergie électrique, de lignes téléphoniques et des canalisations d'eau métalliques, s'il y en a, sont raccordés ensemble. Cette précaution est particulièrement importante dans les régions rurales.

Avertissement : L'utilisateur ne doit pas tenter de faire ces raccordements lui-même; il doit avoir recours à un service d'inspection des installations électriques, ou à un électricien, selon le cas.

AVIS : L'indice d'équivalence de la sonnerie (IES) assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface. La terminaison d'une interface téléphonique peut consister en une combinaison de quelques dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

UL Notices

1. Entry Delay No. 1 and No. 2 (fields *35, *36) cannot be greater than 30 seconds for UL Residential Burglar Alarm installations, and entry delay plus dial delay should not exceed 1 minute. For UL Commercial Burglar Alarm installations, total entry delay may not exceed 45 seconds.
2. For UL Commercial Burglar Alarm and UL Residential Burglar Alarm installations with line security, total exit delay time must not exceed 60 seconds.
3. The maximum number of reports per armed period (field *93) must be set to "0" (unlimited) for UL installations.
4. Periodic testing (see scheduling mode) must be at least every 24 hours.
5. Alarm Sounder plus Auxiliary Power currents must not exceed 600mA total for UL installations (Aux power 500mA max.).
6. All partitions must be owned and managed by the same person(s).
7. All partitions must be part of one building at one street address.
8. If used, the audible alarm device(s) must be placed where it/they can be heard by all partitions.
9. For UL commercial burglar alarm installations the control unit must be protected from unauthorized access. The tamper switch installed to protect the control unit enclosure door is suitable for this purpose.
10. Remote downloading without an alarm company technician on-site (unattended downloading) is not permissible for UL installations.
11. Auto-disarming is not a UL Listed feature.
12. As SIA limits for delay of alarm reporting and sounding can exceed UL limits for commercial and residential applications, the following UL requirements per UL681 are provided:
The maximum time that a control unit shall be programmed to delay the transmission of a signal to a remote monitoring location, or to delay the energizing of a local alarm sounding device to permit the alarm system user to enter and disarm the system, or to arm the system and exit shall not exceed:
 - a) 60 seconds for a system with standard line security or encrypted line security,
 - b) 120 seconds for a system without standard line security or encrypted line security, or
 - c) 120 seconds for a system that does not transmit an alarm signal to a remote monitoring location.
13. This control is not intended for bank safe and vault applications.

SIA Quick Reference Guide

1. *31 Single Alarm Sounding per Zone: If "0" selected, "alarm sounding per zone" will be the same as the "number of reports in armed period" set in field *93 (1 if one report, 2 if 2 reports, unlimited for zones in zone list 7).
2. *34 Exit Delay: Minimum exit delay is 45 seconds.
3. *35/*36 Entry Delay 1 and 2: Minimum entry delay is 30 seconds.
4. *37 Audible Exit Warning: Feature always enabled; field does not exist.
5. *39 Power Up in Previous State: Must be "1," power up in previous state.
6. *40 PABX Access Code or Call Waiting Disable: If call waiting is used, call waiting disable option in field *91 must be set.
7. *50 Burglary Dial Delay: Delay must be a minimum of 30 seconds.
8. *59 Exit Error Alarm Report Code: Always enabled.
9. *68 Cancel Report Code: Default is "code enabled."
10. *69 Recent Closing Report Code: Always enabled.
11. *91 Option Selection: Exit Delay option should be enabled. If call waiting is used, Call Waiting Disable must be set to "1" (enabled).
12. *93 No. reports in Armed Period: Must be set for 1 or 2 report pairs.
13. Cross zone timer programming is set in field *85; cross zone pairs are assigned in zone list 4 using *81 Zone List mode.
14. Duress code is assigned by using the "add a user code" procedure found in the User Guide. Enable Duress code reporting by programming zone 92 using *56 Zone Programming mode.
15. Fire alarm verification is a built-in system feature when a zone is programmed for zone type 16.

Uploading/Downloading via the Internet

This control, when used with a compatible Internet/Intranet Communication Device, supports upload/download programming capability via the Internet using the AlarmNet network or, depending on the communication module used, a Private local area network (Intranet). This allows site maintenance independent of central station monitoring, and modification to sites globally via the Internet or through a private LAN.

Refer to the instructions provided with the communication module for information regarding its installation, programming, and registration. The System Requirements table below lists two sets of system requirements, depending upon whether you intend to communicate over the Internet or whether you are communicating over a Private LAN (Intranet).

Compatible Communication Modules: The following modules support Internet uploading/downloading, but future modules may also provide Internet upload/download support; refer to the module's instructions for compatibility.

Compatible Modules: 7845i-ent, 7845GSMADT

System Requirements

Internet Communication	Intranet (Private LAN) Communication, if applicable*
<p>At the Installation Site:</p> <ul style="list-style-type: none">• Appropriate Internet Communication Module• 7720P Programmer• Broadband Internet Access (for wired modules)• Broadband (Cable/DSL) Modem (for wired modules)• Broadband (Cable/DSL) Router (for wired modules if connecting more than one device to the Internet)• IP compatible Control Panel <p>At the Downloading Office:</p> <ul style="list-style-type: none">• Broadband Internet Access• Broadband (Cable/DSL) Modem• Broadband (Cable/DSL) Router (optional, if connecting more than one device to the Internet)• Computer running Compass Downloading Software version that supports Internet upload/download for this control.	<p>At the Installation Site:</p> <ul style="list-style-type: none">• Internet/Intranet Communication Module• 7720P Programmer• Ethernet Network Connection• IP compatible Control Panel <p>At the Downloading Office:</p> <ul style="list-style-type: none">• 7810iR-ent IP Receiver• Internal Router• Computer(s) running the following software:<ul style="list-style-type: none">- Compass Downloading Software version that supports IP upload/download for this control.- Compass Connect Data Server Application- Compass Connect Control Server Application <p>* see module's instructions for applicability for LAN usage (ex. 7845i-ent supports LAN)</p> <p>NOTE: Compass, the Compass Connect Data Server, and the Compass Connect Control Server applications may all be installed on the same computer if desired. If they are installed on one computer, the computer must have a fixed IP Address.</p>

To set up the control panel, do the following:

1. Connect the module to the control panel's ECP (keypad) terminals.
2. Internet Users: For wired modules, connect the module to the Internet via a cable/DSL modem and router.
Intranet Users: Connect the module to the Intranet (LAN) via the appropriate Ethernet connection.
3. Enable the module in the control panel (using •29 Menu mode) to enable alarm reporting and module supervision.
4. Using the module's programming menus (via •29 Menu mode or 7720P programmer), program the communication device module for address 3 and program the module's other options as required.
5. Register the module with AlarmNet. The module must be registered before downloading or alarm reporting can take place.

To perform upload/download functions:

1. Connect the computer to the Internet and start the Compass downloading software.
2. Open the control's account, then select the Communications function and click the **Connect** button.
3. At the Connect screen, check that the control's MAC address is entered and the TCP/IP checkbox is checked.
4. Click **Connect**. The Internet connection to the control is made automatically via AlarmNet.
5. Once connected, use the Compass downloading software as normal to perform upload/download functions.

WARNING

THE LIMITATIONS OF THIS ALARM SYSTEM

While this System is an advanced design security system, it does not offer guaranteed protection against burglary, fire or other emergency. Any alarm system, whether commercial or residential, is subject to compromise or failure to warn for a variety of reasons. For example:

- Intrusion detectors (e.g., passive infrared detectors), smoke detectors, and many other sensing devices will not work without power. Battery-operated devices will not work without batteries, with dead batteries, or if the batteries are not put in properly. Devices powered solely by AC will not work if their AC power supply is cut off for any reason, however briefly.
- Signals sent by wireless transmitters may be blocked or reflected by metal before they reach the alarm receiver. Even if the signal path has been recently checked during a weekly test, blockage can occur if a metal object is moved into the path.
- A user may not be able to reach a panic or emergency button quickly enough.
- While smoke detectors have played a key role in reducing residential fire deaths in the United States, they may not activate or provide early warning for a variety of reasons in as many as 35% of all fires, according to data published by the Federal Emergency Management Agency. Some of the reasons smoke detectors used in conjunction with this System may not work are as follows. Smoke detectors may have been improperly installed and positioned. Smoke detectors may not sense fires that start where smoke cannot reach the detectors, such as in chimneys, in walls, or roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level of a residence or building. A second floor detector, for example, may not sense a first floor or basement fire. Finally, smoke detectors have sensing limitations. No smoke detector can sense every kind of fire every time. In general, detectors may not always warn about fires caused by carelessness and safety hazards like smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches, or arson. Depending on the nature of the fire and/or location of the smoke detectors, the detector, even if it operates as anticipated, may not provide sufficient warning to allow all occupants to escape in time to prevent injury or death.
- Passive Infrared Motion Detectors can only detect intrusion within the designed ranges as diagrammed in their installation manual. Passive Infrared Detectors do not provide volumetric area protection. They do create multiple beams of protection, and intrusion can only be detected in unobstructed areas covered by those beams. They cannot detect motion or intrusion that takes place behind walls, ceilings, floors, closed doors, glass partitions, glass doors, or windows. Mechanical tampering, masking, painting or spraying of any material on the mirrors, windows or any part of the optical system can reduce their detection ability. Passive Infrared Detectors sense changes in temperature; however, as the ambient temperature of the protected area approaches the temperature range of 90° to 105°F (32° to 40°C), the detection performance can decrease.
- Alarm warning devices such as sirens, bells or horns may not alert people or wake up sleepers if they are located on the other side of closed or partly open doors. If warning devices are located on a different level of the residence from the bedrooms, then they are less likely to waken or alert people inside the bedrooms. Even persons who are awake may not hear the warning if the alarm is muffled by noise from a stereo, radio, air conditioner or other appliance, or by passing traffic. Finally, alarm warning devices, however loud, may not warn hearing-impaired people.
- Telephone lines needed to transmit alarm signals from a premises to a central monitoring station may be out of service or temporarily out of service. Telephone lines are also subject to compromise by sophisticated intruders.
- Even if the system responds to the emergency as intended, however, occupants may have insufficient time to protect themselves from the emergency situation. In the case of a monitored alarm system, authorities may not respond appropriately.
- This equipment, like other electrical devices, is subject to component failure. Even though this equipment is designed to last as long as 20 years, the electronic components could fail at any time.

The most common cause of an alarm system not functioning when an intrusion or fire occurs is inadequate maintenance. This alarm system should be tested weekly to make sure all sensors and transmitters are working properly. The security touchpad (and remote touchpad) should be tested as well.

Wireless transmitters (used in some systems) are designed to provide long battery life under normal operating conditions. Longevity of batteries may be as much as 4 to 7 years, depending on the environment, usage, and the specific wireless device being used. External factors such as humidity, high or low temperatures, as well as large swings in temperature, may all reduce the actual battery life in a given installation. This wireless system, however, can identify a true low-battery situation, thus allowing time to arrange a change of battery to maintain protection for that given point within the system.

Installing an alarm system may make the owner eligible for a lower insurance rate, but an alarm system is not a substitute for insurance. Homeowners, property owners and renters should continue to act prudently in protecting themselves and continue to insure their lives and property.

We continue to develop new and improved protection devices. Users of alarm systems owe it to themselves and their loved ones to learn about these developments.

WARRANTY INFORMATION

For the latest warranty information, please go to:

www.honeywell.com/security/hsc/resources/wa

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